



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,318	02/06/2004	Cullen E. Bash	200316080-1	6469
22879	7590	12/12/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			JIANG, CHEN WEN	
			ART UNIT	PAPER NUMBER
			3744	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	10/772,318	BASH ET AL.	
	Examiner	Art Unit	
	Chen-Wen Jiang	3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6,8-12,14,19-21,23-29,31,33-35,38-45 and 47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zweig (U.S. 2002/0173877).

Zweig discloses a mobile robotic with web server and digital radio links. The robot includes sensors, mechanical actuators, appliances, and the like. The system comprises mobile robot 1, sensors 2,5,6, remote computer 4, telecommunications link 3 and interfaces 7,8. Referring to FIG. 2 shows the general structure of the software (1) onboard the robot. The robot's computer processor is typically controlled by a multitasking operating system (2). The maneuvering, detecting, manipulating and controlling of the robot/sensing system are inherent in the system.

In regard to claims 3-5, the sensor on the pole with various heights is a design choice. Zewig discloses the system that can move a few test items, or perform some other limited chore.

3. Claims 1-6,8-12,14,19-29,31,33-35,38-45 and 47 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over LaMarca et al. (U.S. 2004/0139110).

LaMarca et al. disclose a sensor network control and calibration system. Referring to Fig.1, the system 10 includes a mobile robotic service unit 20 having an associated calibrated sensor 22. The robotic service unit 20 is capable of maneuvering around the environment to respective positions adjacent to various sensor platforms 41, and supports autonomous, semi-autonomous, or guided identification of sensor location for sensors distributed in an environment. Both the robotic service unit and the sensor platforms 41, which may include, for example, sensors for detecting temperature, water level, relative humidity, luminance, or vibration, are connected by wireless or wired links 42, to a computer system 30. The computer system 30 accordingly has processing and memory 34, along with data storage 36, to process information developed or associated with the sensor platforms and mobile robotic service unit, the information being received through wireless communication module 32 or via a wired network connection 38. Cooperation between the robotic service unit 20, sensor platforms 41, and computer system 30 permits operation of the robotic service unit 20 to calibrate sensors on the sensor platforms with respect to one or more calibrated sensors mounted on the robotic service unit.

4. Claims 1-4,8-11,15,19,22,23,25,33,39,40-42,47 and 48 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakanishi et al. (U.S. Patent Number 6,283,380).

Nakanishi et al. disclose an air conditioning system for quickly and effectively controlling the temperature in a room. The system comprises a plurality temperature sensors S1-S9, airflow rate and direction detector, air conditioner control circuit 78, local computer 70, input/output port 74, airflow control circuit 76, LAN and remote PC 82. A simulation is performed on the basis of the detected temperatures and the current airflow rate and airflow directions. Sensor locations are design choice based on the layout of the environment.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5,6,12-14,16-18,20,21,24,26-32,34-38 and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al. (U.S. Patent Number 6,283,380) in view of Zweig (U.S. 2002/0173877).

Nakanishi et al. disclose the invention substantially as claimed. However, Nakanishi et al. do not disclose robotic with sensor. Zweig discloses robot device can be used on sensor in the same field of endeavor for the purpose of collect data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Nakanishi et al. with robotic in view of Zweig so as to collect data.

7. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi et al. (U.S. Patent Number 6,283,380) in view of Olarig et al. (U.S. Patent Number 6,639,794).

Nakanishi et al. disclose the invention substantially as claimed. However, Nakanishi et al. do not disclose airflow sensor on the rack. Olarig et al. disclose airflow and temperature sensor are interchangeable on the rack in the same field of endeavor for the purpose of collect data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Nakanishi et al. with airflow sensor on the rack in view of Olarig et al. so as to collect data.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-6,10-48 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7,13-15,26-32,33-39 and 46 of copending Application No. 10/639,428. Although the conflicting claims are not identical, they are not patentably distinct from each other because sensors, data storage, robotic device, transmitting device, cooling system, network and computer are claimed in these applications.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakazato et al. (U.S. Patent Number 5,718,628) is made of record as relevant prior art.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melba Bumgarner can be reached on (571) 272-4709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang
Primary Examiner

